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| 10/676,744 | 09/30/2003 | Harold N. Rosenstock | IS01409MCG | 7941 |
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| MOTOROLA, INC. LAW DEPARTMENT 1303 E. ALGONQUIN ROAD SCHAUMBURG, IL 60196 | | | EXAMINER LAZARO, DAVID R | |
| | | | ART UNIT 2155 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,744

Applicant(s)

ROSENSTOCK ET AL.

Examiner

David Lazaro

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/30/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-42 are pending in this office action.

Petitions

2. A petition under 37 C.F.R. 1.76(a) was granted on 5/19/2004 in relation to non-signing inventors Dykiel and Lagueux and the refusal of inventor Duthie to sign.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 09/30/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. The examiner accepts the drawings filed 09/30/2003.

Specification

5. The disclosure is objected to because of the following informalities: Please provide the application and Patent numbers for the related cases on page 1 of the specification.
6. The use of the trademark Infiniband has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

7. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. Claims 1 and 15-42 contains the trademark/trade name Infiniband. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe an architecture subnet in claims 1 and 15-28 and an architecture node in claims 29-42 and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 15-17, 20-23 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,941,350 by Frazier et al. (Frazier).

11. With respect to claims 15, an InfiniBand architecture subnet, comprising:

a plurality of nodes (Col. 3 lines 13-43, Col. 4 lines 3-11 and Col. 8 lines 32-44); wherein each of the plurality of nodes has a priority value and a globally unique identifier (Col. 9 lines 17-30 and Col. 10 lines 20-38: priorities and globally unique identification - GUID);

a set of standby subnet managers (Col. 8 lines 38-44); and

a subnet manager for each of the plurality of nodes (Col. 8 lines 38-44), wherein the plurality of nodes; are ranked according to the priority value and the globally unique identifier; and wherein, the subnet manager from each of the plurality of nodes is selected to be included in the set of standby subnet managers based on the priority value and the globally unique identifier of each of the plurality of nodes (Col. 10 lines 20-38 and Col. 11 lines 49-64: selection can use both priority and guid).

12. With respect to claim 16, Frazier further teaches wherein the subnet manager from each of the plurality of nodes is selected to be included in the set of standby subnet managers up to a limit value (Col. 12 lines 9-19).

13. With respect to claim 17, Frazier further teaches wherein the plurality of nodes comprise a first node and a second node, wherein each of the plurality of nodes is ranked from a highest priority value to a lowest priority value, and wherein if the priority value for the first node is identical to the priority value of the second node, the first node and the second node are further ranked from a lowest globally unique identifier to a highest globally unique identifier (Col. 10 lines 20-38).

14. With respect to claim 20, Frazier further teaches wherein the plurality of nodes comprise a first node and a second node, wherein each of the plurality of nodes is ranked from a lowest priority value to a highest priority value, and wherein if the priority value for the first node is identical to the priority value of the second node, the first node and the second node are further ranked from a highest globally unique identifier to a lowest globally unique identifier (Col. 10 lines 20-38).

15. With respect to claims 21, Frazier further teaches wherein the subnet manager is selected from each of the plurality of nodes with a lowest set of priority values (Col. 10 lines 20-38).

16. With respect to claims 22, Frazier further teaches wherein the subnet manager is selected from each of the plurality of nodes with a highest set of globally unique identifiers (Col. 10 lines 20-38).

17. With respect to claims 23, Frazier further teaches wherein the plurality of nodes comprise a first node and a second node, wherein each of the plurality of nodes is ranked from a highest priority value to a lowest priority value, and wherein if the priority value for the first node is identical to the priority value of the second node, the first node and the second node are further ranked from a highest globally unique identifier to a lowest globally unique identifier (Col. 10 lines 20-38).

18. With respect to claims 25, Frazier further teaches wherein the subnet manager is selected from each of the plurality of nodes with a highest set of globally unique identifiers (Col. 10 lines 20-38).

19. With respect to claims 26, Frazier further teaches wherein the plurality of nodes comprise a first node and a second node, wherein each of the plurality of nodes is ranked from a lowest priority value to a highest priority value, and wherein if the priority value for the first node is identical to the priority value of the second node, the first node and the second node are further ranked from a lowest globally unique identifier to a highest globally unique identifier (Col. 10 lines 20-38).

20. With respect to claims 27, Frazier further teaches wherein the subnet manager is selected from each of the plurality of nodes with a lowest set of priority values (Col. 10 lines 20-38).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 1-3, 6-9, 11-13, 29-31, 34-37 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,941,350 by Frazier et al. (hereinafter Frazier) in view of InfiniBand Architecture Specification Volume 1 Release 1.1 published November 6, 2002 and provided through applicant's IDS submitted 09/30/2003 (hereinafter IBA Specification).

23. With respect to claims 1 and 29, Frazier teaches a method (and corresponding InfiniBand architecture node), comprising:

providing an subnet architecture having a plurality of nodes (Col. 3 lines 13-43, Col. 4 lines 3-11 and Col. 8 lines 32-44: SAN with plurality of nodes forming multiple subnets), wherein each of the plurality of nodes has a priority value and a globally unique identifier (Col. 9 lines 17-30 and Col. 10 lines 20-38: priorities and globally unique identification - GUID);

providing each of the plurality of nodes with a subnet manager (Col. 8 lines 38-44;

ranking each of the plurality of nodes according to the priority value and the globally unique identifier (Col. 10 lines 20-38: ranking can use both priority and guid);
and

selecting if the subnet manager is included in a set of standby subnet managers based on the priority value and the globally unique identifier of each of the plurality of nodes (Col. 10 lines 20-38 and Col. 11 lines 49-64: selection can use both priority and guid).

Frazier does not explicitly disclose the subnet architecture is an Infiniband architecture subnet. IBA Specification describes the Infiniband architecture subnet as an interconnect technology for interconnecting processor nodes and I/O nodes to form a system area network (Page 54, section 1.2). Further, Infiniband architecture supports complex system area networks consisting of multiple independent and clustered hosts and I/O components (Page 56, section 1.3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Frazier and modify it as indicated by IBA Specification such that the subnet architecture is an Infiniband architecture subnet. One would be motivated to have this as such an architecture would be beneficial to the system area network of Frazier (In Frazier: Col. 3 lines 13-43, Col. 4 lines 3-11 and Col. 8 lines 32-44) and (In IBA Specification page 55-56: 1.2.3 - 1.3).

24. With respect to claims 2 and 30, Frazier further teaches wherein selecting comprises selecting if the subnet manager is included in the set of standby subnet managers up to a limit value (Col. 12 lines 9-19).

25. With respect to claims 3 and 31, Frazier further teaches wherein ranking each of the plurality of nodes comprises ranking each of the plurality of nodes from a highest priority value to a lowest priority value, and wherein if the priority value for a first node is

identical to the priority value of a second node, further ranking the first node and the second node from a lowest globally unique identifier to a highest globally unique identifier (Col. 10 lines 20-38).

26. With respect to claims 6 and 34, Frazier further teaches wherein ranking each of the plurality of nodes comprises ranking each of the plurality of nodes from a lowest priority value to a highest priority value, and wherein if the priority value for a first node is identical to the priority value of a second node, further ranking the first node and the second node from a highest globally unique identifier to a lowest globally unique identifier (Col. 10 lines 20-38).

27. With respect to claims 7 and 35, Frazier further teaches wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a lowest set of priority values (Col. 10 lines 20-38).

28. With respect to claims 8 and 36, Frazier further teaches wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a highest set of globally unique identifiers (Col. 10 lines 20-38).

29. With respect to claims 9 and 37, Frazier further teaches wherein ranking each of the plurality of nodes comprises ranking each of the plurality of nodes from a highest priority value to a lowest priority value, and wherein if the priority value for a first node is identical to the priority value of a second node, further ranking the first node and the

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second node from a highest globally unique identifier to a lowest, globally unique identifier (Col. 10 lines 20-38).

30. With respect to claims 11 and 39, Frazier further teaches wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a highest set of globally unique identifiers (Col. 10 lines 20-38).

31. With respect to claims 12 and 40, Frazier further teaches wherein ranking each of the plurality of nodes comprises ranking each of the plurality of nodes from a lowest priority value to a highest priority value, and wherein if the priority value for a first node is identical to the priority value of a second node, further ranking the first node and the second node from a lowest globally unique identifier to a highest globally unique identifier (Col. 10 lines 20-38).

32. With respect to claims 13 and 41, Frazier further teaches wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a lowest set of priority values (Col. 10 lines 20-38).

33. Claims 4, 5, 10, 14, 32, 33, 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier in view of IBA Specification and in further view of U.S. Patent 6,519,660 by Rooney (Rooney).

34. With respect to claims 4 and 10 and 32 and 38, Frazier does not explicitly teach wherein selecting comprises selecting the subnet manager to be included in the set of

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standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a highest set of priority values as Frazier instead uses the lowest set of priority values (Col. 10 lines 20-38).

Rooney demonstrates how one can either use a highest to lowest or lowest to highest selection in a priority selection scheme, as it is essentially a matter of design choice (Col. 16 lines 31-49).

It would have been obvious to one of ordinary skill in the art to take the method disclosed by Frazier in view of IBA specification and modify it as indicated by Rooney such that it further comprises wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a highest set of priority values. Using the highest values instead of the lowest values is a matter of design choice.

35. With respect to claim 5 and 14 and 33 and 42, Frazier does not explicitly disclose wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a lowest set of globally unique identifiers as Frazier instead uses the highest set of globally unique identifiers (Col. 10 lines 20-38).

Rooney demonstrates how one can either use a highest to lowest or lowest to highest selection in a priority selection scheme, as it is essentially a matter of design choice (Col. 16 lines 31-49).

It would have been obvious to one of ordinary skill in the art to take the method disclosed by Frazier in view of IBA specification and modify it as indicated by Rooney

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such that it further comprises wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a lowest set of globally unique identifiers. Using the lowest values instead of the highest values is a matter of design choice.

36. Claims 18, 19, 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier in view of Rooney.

37. With respect to claims 18 and 24, Frazier does not explicitly disclose wherein the subnet manager is selected from each of the plurality of nodes with a highest set of priority values as Frazier instead uses the lowest set of priority values (Col. 10 lines 20-38).

Rooney demonstrates how one can either use a highest to lowest or lowest to highest selection in a priority selection scheme, as it is essentially a matter of design choice (Col. 16 lines 31-49).

It would have been obvious to one of ordinary skill in the art to take the subnet disclosed by Frazier and modify it as indicated by Rooney such that it further comprises wherein the subnet manager is selected from each of the plurality of nodes with a highest set of priority values. Using the highest values instead of the lowest values is a matter of design choice.

38. With respect to claim 19 and 28, Frazier does not explicitly disclose wherein the subnet manager is selected from each of the plurality of nodes with a lowest set of

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globally unique identifiers as Frazier instead uses the highest set of globally unique identifiers (Col. 10 lines 20-38).

Rooney demonstrates how one can either use a highest to lowest or lowest to highest selection in a priority selection scheme, as it is essentially a matter of design choice (Col. 16 lines 31-49).

It would have been obvious to one of ordinary skill in the art to take the method disclosed by Frazier and modify it as indicated by Rooney such that it further comprises wherein selecting comprises selecting the subnet manager to be included in the set of standby subnet managers by selecting the subnet manager from each of the plurality of nodes with a lowest set of globally unique identifiers. Using the lowest values instead of the highest values is a matter of design choice.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Lazaro
August 17, 2007